



Key features

- Universal input:85—264Vac 50/60 Hz
- EMC reaches level 4 (EN61000-6-2,A class heavy industry standard)
- Low ripple and noise
- Over load and short-circuit protection
- High efficiency, high power density, minimum size
- Lower power, RoHS , no-load loss<0.1W
- 100% test and work
- 3 years product warranty

HP50 series --- a high stability、super small size modular switching power supply offered by Zhongyiguang. It features minute extension 、high reliability、high isolation voltage 、higher cost performance etc.And it is mainly used in heavy industry environment instruments and other related equipment , such as applied to a relatively harsh environment electromagnetic compatibility must refer to the application circuit.

电气规格

Model	output voltage(V)	Output current (A)	Output power(W)	Efficiency(%)	Ripple
HP50-S12	12	4	48	84	50mVp-p
HP50-S15	15	3.3	49	85	50mVp-p
HP50-S24	24	2	48	87	50mVp-p
HP50-S48	48	1	48	88	50mVp-p

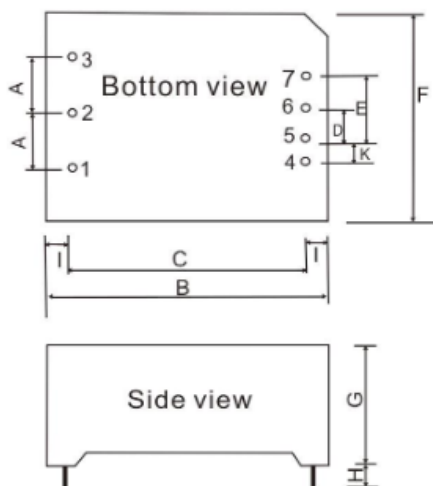
一般特性

Output	Output voltage accuracy	±2.0%	
	Source effect	±1.0%	
	Load effect	±1.0%	
	Starting time (TYP)	40ms/230VAC	100ms/115VAC at full load
	Output hold time (TYP)	40ms/230VAC	15ms/115VAC at full load
Input	Input voltage range	85 ~ 264VAC	70 ~ 370VDC
	Input frequency	47 ~ 440Hz	
	Input current(TYP)	780mA / 115VAC	470mA / 230VAC
	Inrush current (TYP)	Cold booting 20 A / 115 VAC	40 A / 230 VAC
	Recommended values for External Fuses	T3.15A / 250Vac (disconnect slowly)	
	Leakage current (TYP)	< 1mA at 230VAC/50Hz	
Protection	Over-current and short circuit protection, automatic recovery after troubleshooting		
Work environment	Operating Temperature	-40 ~ +70 °C (≥40°C,according to the0.65W/°C derating)	
	Humidity	85% .RH max	
	Storage Temperature	-40 ~ +85, 10 ~ 95% RH	
	Temperature coefficient	0.03%/ (0~ 50°C)	
	Vibration coefficient	10~500Hz,2G10min./1cycle, 60min.each along X,Y,Z axes	
Safety and	Safety Standard	Conform to UL1012,EN60950,UL60950	



EMC (Note:3)	I/O-Isolation voltage	I/P-O/P:3.0KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC
	Isolation resistance	I/P-O/P,I/P-FG,O/P-FG:> 100M Ohms/500VDC 25°C 70% RH
	EMI / RFI conducted	Conform to EN55011, EN55022 (CISPR22)
	ESD	IEC/EN 61000-4-2 level 4 8kV/15kV (Note: See the application circuit for details)
	RF	IEC/EN 61000-4-3 (Note: See the application circuit for details)
	EFT	IEC/EN 61000-4-4 level 4 4kV (Note: See the application circuit for details)
	Surge	IEC/EN 61000-4-5 level 4 2kV/4kV (Note: See the application circuit for details)
Others	MTBF	200K hrs min. MIL-HDBK-217F @ 25°C
	Dimensions	70*48*23.5mm (L*W*H)
	Weight	120g/piece, 14.3kg/box
	Pack	112piece
	The size of the packing box	360*300*250mm
Notes	<ol style="list-style-type: none"> All parameters NOT specially mentioned are measured at 25 of ambient temperature ,humidity<75%, 230VAC input and rated load test. Ripple & noise are measured at 20MHz of bandwidth by using a 300mm twisted pair-wire terminated with a 0.1uf & 100uf electrolytic capacitor. 	

e final equipment



	Shell size	Pin	Pin function
A	20.0	1	FG
B	70.0	2	AC(N)
C	62.0	3	AC(L)
D	11.5		
E	23.0	4	No pin
F	48.0	5	-Vo
G	23.5	6	No pin
I	≥ 4.0	7	+Vo
k	5.75		

Remark: unit of measurement:mm
 Size of terminal section:1.00mm
 Terminal to larence: ± 0.1mm
 Leng of the terminal:≥4.00mm
 No to larence:± 0.5mm
 Module weight:120g(typical value)

Block diagram